



Edgewood Area - Aberdeen Proving Ground, Maryland 21010-5424

U.S. Army Soldier and Biological Chemical Command

Refillable Battery Box for the M8A1 Automatic Chemical Agent Alarm

Description: The M8A1 Automatic Chemical Agent Alarm currently uses the BA-3517/U battery; a one-time use item, requiring disposal after the battery life is exhausted. Based on BA-3517/U battery shortages experienced during Desert Storm and Desert Shield, the User's Representative asked SBCCOM to investigate the feasibility of developing a power source capable of using replaceable D cells. The Refillable Battery Box for the M8A1 Automatic Chemical Agent Alarm was developed to provide the soldier in the field multiple input power options for using the M8A1.



Capability: The Refillable Battery Box will accept the following power sources:

- 24 each - BA-3030/U or equivalent, Alkaline D cells
- 2 each - BA-5590/U, Lithium Sulfur Dioxide Batteries
- 120VAC using an AC/DC converter

The battery box will also cause the M42 Alarm to give a low voltage warning when the output of the battery box drops below 18VDC. The operator should then change the batteries so the M8A1 meets the operation check requirements.

Advantages: The BA 3517/U is currently the battery used with the M8A1. The Refillable battery box offers the following advantages:

- Operation at temperatures below 20° F using the BA-5590/U batteries
- Use of readily available D cells
- Extend battery life by using AC adapter during training and maintenance actions
- Reduce the number of false detection's sometimes caused by low voltage from the BA3517/U battery
- Increased operational readiness



Additional information can be obtained by directing your inquiries to Technical Director, Edgewood Chemical Biological Center, ATTN: AMSSB-REN-ED/ Ms. Margaret Freeman. Aberdeen Proving Ground, MD 21010-5424, by telephone at (410) 436-5823 or DSN 584-5823, or email to margaret.freeman@sbccom.apgea.army.mil or Gerald Dietz at (410) 436-5626, DSN 584-5626, email gerald.dietz@sbccom.apgea.army.mil.